

# Digital Divide Challenges Access to E-Government

Katharine V. Macy

**M**ore and more government resources and processes are making the transition to e-government in the United States, requiring users to access the Internet in order to obtain information and apply for services. E-government is expected to help increase access to constituents. However, portions of our populations remain in the digital divide, limiting their ability to access government information. The government has been working to address this gap. Meanwhile, for those individuals who have adopted Internet usage but also live within the digital divide, their only access point may be the local public library. As a result, libraries must consider how to meet the needs of patrons with limited access to digital information and digital literacy.

## The Push for Paperless and E-Government

Local, state, and federal governments are experiencing increased pressure to move to digital processes for several reasons. E-government processes are believed to be more cost effective. The efficiencies go beyond the reduction in paper usage, allowing government activities to be streamlined, creating a more customer focused and responsive government.<sup>1</sup> The E-Government Act of 2002 defines e-government as government use of Internet applications and other information and communication technologies (ICTs) combined with the development of government processes to implement these technologies to enhance access to government information and services to its stakeholders (public, other agencies, and other government entities) as well as bring about process improvements to increase effectiveness, efficiency, service quality, and transformation.<sup>2</sup>

The move to e-government has become a priority for the federal government as part of its Open Government Initiative, as e-government is seen as one of the keys to transparency and providing easy access to government information to its constituents while promoting the ideal of democracy.<sup>3</sup>

## The Conundrum of Open Government

As part of the push for open government through e-government, many federal agencies, not to mention local and state agencies not under federal mandate, are eliminating some paper processes altogether. To support the Open Government Directive, President Obama issued a memorandum directing government agencies to reform records management practices to support the move to a transparent and open government through electronic records.<sup>4</sup> The Office of Management and Budget and National Archives and Records Administration responded to the 2011 presidential memorandum by creating a directive that would require all federal agencies to manage all permanent electronic records electronically by 2019.<sup>5</sup> As a result of this push, federal agencies will continue to eliminate paper processes, causing many local and state agencies to follow suit.

This move to electronic processes and records is a positive step for most constituents. It eases the flow of information and creates a more responsive government. It promotes democracy, as information can be easily communicated to individuals, provided those individuals are able to access the information. Unfortunately, there is still a digital divide in existence in the United States; some individuals have incredible difficulty accessing government agencies and services through the Internet.

## What Is the Digital Divide?

The digital divide was a term that was first coined in the mid-1990s to indicate whether someone had access to a computer and/or the Internet. Sometimes the digital divide is used in reference to the connectivity of a nation as a whole—i.e., the developed versus the developing world. In the context of this article, the digital divide addresses the discrepancy in connectivity between individuals and households in communities across the United States. The concept of the digital divide came to the

forefront of national attention during the State of the Union Address in 2000, when President Clinton indicated a desire to close the divide through schools and libraries.<sup>6</sup> Over the next decade, significant progress was made to close this gap. In 2011, a report published by the US Census Bureau stated that 75.6 percent of households reported having a computer, compared to 51.0 percent in 2000.<sup>7</sup> However, there is still a gap in access to ICTs with certain population groups. The same US Census Bureau report clearly shows that a significant portion of Black (43.1 percent) and Hispanic (41.7 percent) households did not have access to Internet within their homes. Educational attainment was a factor, as people with a high school diploma (38.8 percent) or lower (63.1 percent) were less likely to have access to the Internet within their home. Age is also a factor, as people 55 years and older (38.3 percent) are more likely lack access.

Today, the digital divide considers not only whether an individual has access to a computer in their household with Internet but whether they have access to broadband Internet, as well as smartphone technology. According to the Pew Research Center's (PEW) Internet and American Life Project, the major factors contributing to whether a person has connectivity include age, educational attainment and income, community (rural versus urban and suburban), disability, and Spanish speaking preference.<sup>8</sup> PEW has found that, as of 2013, 85 percent of households had Internet connectivity and 70 percent had broadband. PEW's research confirmed census findings that minorities are less likely to have broadband Internet connectivity, with 36 percent of Black, non-Hispanic and 37 percent of Hispanic households lacking connectivity. The numbers improve when looking at whether or not those individuals had a smartphone or broadband access by 15 and 22 percent respectively. Only 62 percent of individuals in rural communities had access to broadband and 70 percent in those communities had broadband or a smartphone. Individuals with disabilities are 27 percent less likely to have Internet and 28 percent less likely to have broadband than all adults. PEW also confirmed that age is a significant factor; 48 percent of non-users of the Internet are age 65 and older.<sup>9</sup>

In 2013, PEW found that there are four primary categories for why individuals are not connected to the Internet: 34 percent of non-users don't see the relevance; 32 percent have usability issues; 19 percent indicate that price or cost is an issue; and the remaining 7 percent indicate lack of availability/access.<sup>10</sup>

## Challenges Libraries Face

According to PEW's Internet Project, 63 percent of newcomers to the Internet will need assistance looking for information.<sup>11</sup> Many times the most easily accessible resource for free broadband Internet access, as well as assistance in using the Internet,

is within the local public library. While some of these users have smartphones, it is not a substitute for a wired connection when considering that many government agencies require navigating electronic forms that may be difficult to read on small screens and aren't necessarily built for mobile technology as of yet, not to mention all the other activities that patrons need to do electronically, such as fill out job applications.

This puts increasing pressure on library resources and personnel, as patrons rely on not only accessing the technology but may need additional guidance depending on their level of digital literacy. A recent academic study found that this can be particularly challenging for rural libraries as they have limited trained personnel and budgets, limiting services and available resources and is likely contributing to the performance lag of rural libraries in comparison to urban and suburban libraries in supporting access to government services (e.g. training, reference guide development).<sup>12</sup>

## Recent Government Actions to Address the Divide

The government is very aware that there is a problem with people having ready access to the Internet. Actions have been taken at the federal and congressional level within the last five years to help increase access and adoption of broadband Internet services, as well as to support libraries that provide vital services for patrons who fall within the digital divide.

As part of the American Recovery and Reinvestment Act (ARRA), the Broadband Technology Opportunities Program (BTOP) was created, which provided \$7.2 billion to the National Telecommunications and Information Administration (NITA) and the Department of Agriculture's Rural Utilities Service (RUS) to fund projects that would expand access and adoption of broadband services in the United States.<sup>13</sup> This program had two rounds for applications (Round 1: July 14, 2009–August 14, 2009, Round 2: February 16, 2010–March 16, 2010).<sup>14</sup>

Another example of actions taken by the government to mitigate the impact of lack of broadband connectivity at home for students is the ConnectED Initiative. Lack of broadband access at home has put students at a disadvantage. Schools in communities where broadband has poor adoption may shy away from Internet-based assignments.<sup>15</sup> This increases the potential of creating ill-equipped individuals for tomorrow's workforce as it may limit digital literacy. To address this issue, President Obama announced the ConnectED Initiative in June 2013, which has the goal of increasing broadband across classrooms and libraries and the training of teachers so they can optimize this technology in the learning process.<sup>16</sup> As part of the ConnectED Initiative,

\$2 billion was pledged over the next two years to continue to support the E-rate program.<sup>17</sup> The E-rate program is directed by the Federal Communications Commission (FCC). The program enables schools and libraries to obtain affordable ICTs (telecommunications services, broadband Internet, internal network connections).<sup>18</sup> There are rules for eligibility, including educational purposes and not-for-profit status.<sup>19</sup>

The issue of broadband adoption is continuing to be reviewed by the US Congress. On October 29, 2013, Senator Mark Prior (D-AR) of the Committee on Commerce, Science and Transportation held a hearing on broadband adoption in the United States. In his comments, he stated that he saw three reasons as to why American's who are able to access broadband do not adopt it,

One of the—a lot of Americans just don't understand the relevancy in why they should do this, a lot of Americans feel like they're not capable or they don't have the skills to do it and then there are some Americans who say they just can't afford it.<sup>20</sup>

At that hearing, Senator Roger Wicker (R-MS) added that he thought that digital literacy, relevance, and cost of service and equipment were issues before listening to testimony regarding the causes of the digital broadband divide and strategies to mitigate.<sup>21</sup>

Recently, on May 6, 2014, Senators John Thune (R-SD) and Amy Klobucher (DFL-MN) led a letter to the chairman of the FCC requesting that the agency propose new rules that would change the requirements that small carriers can only receive high cost support for customers who subscribe also to landlines.<sup>22</sup> Considering the tendency of consumers to have moved away from landlines to cellular phone and voice over Internet protocols (VOIP), this is critical in order for expansion of broadband into rural communities.

## What can Libraries Do?

In April 2014, the Institute of Museums and Library Services (IMLS) held a public hearing to discuss the issue of libraries and broadband. Richard Reyes-Gavilan, executive director of the District of Columbia Public Library, commented that providing access as well as digital literacy skills at libraries is still necessary today as more and more daily life processes have moved online (i.e., government, job applications, school communications).<sup>23</sup>

Given the move for the federal government to e-government practices, as well as increasing need of users to access local and state governments online as well as non-government services, libraries must adopt a strategy that can promote the growth of access and adoptability of digital services. This is necessary in

order to fulfill the promise provided by the ALA Core Value of Librarianship, democracy.

Programming and services must be developed while keeping the individual community in mind, especially considering increasingly tight budget constraints and limited staff, which creates tension on the tightrope that all libraries are already balancing on. Some potential areas of focus:

*Advocacy:* Encourage city and other community/civic leaders to visit the library so they understand the services and programs offered. Work to form partnerships in the community to support digital access and digital literacy programs.

*Grant Writing:* Apply for government funds such as the E-Rate program, or funds that support technology and information services from nonprofit organizations.

*Digital Literacy Programming:* Programming should be community based. If the community has a high Spanish-Speaking population, then programming may want to focus on helping these groups learn to access the Internet. Perhaps the community has a high population of citizens age 65+ that may require taking programming into the community's senior centers to help this group gain access.

*Resource Development:* Patrons find reference guides incredibly helpful if they are targeted to help complete a specific task. Libraries may want to develop guides to help patrons accomplish tasks on the most commonly visited government websites within their community.

Toolkits have been developed to help assist libraries as they support their patrons.

*NTIA Broadband Adoption Toolkit:* This was developed based on the experiences of BTOP grant recipients and provides guidance on subjects such as teaching digital literacy, including community related examples of projects in action.<sup>24</sup>

*E-Government Toolkit:* Developed by ALA, this toolkit was developed to help libraries develop policies, programs, and services around supporting patron needs to access e-government resources.<sup>25</sup>

With the move to e-government, libraries have to step up and provide support to patrons with limited access to Internet due to the digital divide, which is still present today. This means providing access as well as training to help individuals access the Internet, sometimes for the first time. It is imperative that libraries continue to address this issue when advocating to government about their community's needs, as well as when resource planning within libraries. Historically, there have been government programs in place to reduce this divide; however, libraries must ensure that government officials know this issue is still important to address. As long as the public library is the only available resource for certain population groups to access broadband Internet for government information, as well as completing basic activities such as applying for jobs, this issue needs to be top of mind to solve. It is the only way to ensure people have equitable access to information.

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## References

1. Tim Field, Elizabeth Muller, and Edwin Lau, "The Case for E-Government Excerpts from the OECD Report 'The E-Government Imperative.'" *OECD Journal on Budgeting* 3, no. 1 (2003): 61–131.
2. *E-Government Act of 2002*, P.L. 107-347, [www.gpo.gov/fdsys/pkg/PLAW-107publ347/pdf/PLAW-107publ347.pdf](http://www.gpo.gov/fdsys/pkg/PLAW-107publ347/pdf/PLAW-107publ347.pdf).
3. US President, Memorandum, "Transparency and Open Government," *Federal Register* 74, no. 015 (January 26, 2009): 4685, [www.gpo.gov/fdsys/pkg/FR-2009-01-26/pdf/E9-1777.pdf](http://www.gpo.gov/fdsys/pkg/FR-2009-01-26/pdf/E9-1777.pdf).
4. US President, Memorandum, "Managing Government Records," *Federal Register* 76, no. 231 (December 1, 2011): 75423, <https://www.federalregister.gov/articles/2011/12/01/2011-31096/managing-government-records>.
5. Office of Management and Budget, "Managing Government Records Directive." Memorandum (August 24, 2012), [www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-18.pdf](http://www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-18.pdf).
6. William J. Clinton, "Address Before a Joint Session of the Congress on the State of the Union." In *Public Papers of the Presidents of the United States: William J. Clinton, 2000, Book 1—January 1 to June 26* (Washington D.C.: Government Printing Office, 2001), 129–40.
7. US Department of Commerce, US Census Bureau, *Computer and Internet Use in the United States: Population Characteristics*, by Thom File. May 2013, [www.census.gov/prod/2013pubs/p20-569.pdf](http://www.census.gov/prod/2013pubs/p20-569.pdf).
8. Lee Rainie, "The State of Digital Divides," presented at the Washington Post Live: "Bridging the Digital Divides," November 11, 2013, [www.pewinternet.org/2013/11/05/the-state-of-digital-divides-video-slides](http://www.pewinternet.org/2013/11/05/the-state-of-digital-divides-video-slides).
9. Aaron Smith, "Technology Adoption by Lower Income Populations | Pew Research Center's Internet & American Life Project," presented at the APHSA-ISM Annual Conference, October 8, 2013, [www.pewinternet.org/2013/10/08/technology-adoption-by-lower-income-populations](http://www.pewinternet.org/2013/10/08/technology-adoption-by-lower-income-populations).
10. Lee Rainie, "The State of Digital Divides."
11. Kathryn Zickuhr, "Who's Not Online and Why," *Pew Research Center's Internet & American Life Project*, accessed June 8, 2014, [www.pewinternet.org/2013/09/25/whos-not-online-and-why](http://www.pewinternet.org/2013/09/25/whos-not-online-and-why).
12. Brian Real, John Carlo Bertot, and Paul T. Jaeger. "Rural Public Libraries and Digital Inclusion: Issues and Challenges," *Information Technology & Libraries* 33, no. 1 (March 2014): 6–24.
13. US Department of Commerce, National Telecommunications and Information Administration, "Program Information | BroadbandUSA—NTIA," accessed June 11, 2014, [www2.ntia.doc.gov/information](http://www2.ntia.doc.gov/information).
14. US Department of Agriculture, US Department of Commerce, Notices, "Notice of Funds Availability (NOFA) and solicitation of applications," *Federal Register* 74, no. 130 (July 09, 2009): 33104, [www.gpo.gov/fdsys/pkg/FR-2009-07-09/pdf/E9-16268.pdf](http://www.gpo.gov/fdsys/pkg/FR-2009-07-09/pdf/E9-16268.pdf); US Department of Commerce, Notices, "Notice of Funds Availability (NOFA) and solicitation of applications," *Federal Register* 75, no. 14 (January 22, 2010): 3792, [www.gpo.gov/fdsys/pkg/FR-2010-01-22/pdf/2010-1097.pdf](http://www.gpo.gov/fdsys/pkg/FR-2010-01-22/pdf/2010-1097.pdf).
15. "Digital Divide Hurts Students," *Newsletter on Intellectual Freedom* 62, no. 2 (March 2013): 44–89.
16. The White House, "ConnectED | The White House," accessed June 11, 2014, [www.whitehouse.gov/issues/education/k-12/connected](http://www.whitehouse.gov/issues/education/k-12/connected).
17. The White House, Office of the Press Secretary, "FACT SHEET: Opportunity For All—Answering the President's Call to Enrich American Education Through ConnectED | The White House," accessed June 11, 2014, [www.whitehouse.gov/the-press-office/2014/02/04/fact-sheet-opportunity-all-answering-president-s-call-enrich-american-ed](http://www.whitehouse.gov/the-press-office/2014/02/04/fact-sheet-opportunity-all-answering-president-s-call-enrich-american-ed).
18. Federal Communications Commission, "E-Rate—Schools & Libraries USF Program | FCC.gov," May 29, 2014, [www.fcc.gov/encyclopedia/e-rate-schools-libraries-usf-program](http://www.fcc.gov/encyclopedia/e-rate-schools-libraries-usf-program).

19. *Telecommunications—Universal Service Support for Schools and Libraries*, 47 CFR pt. 54F.
20. US Congress, Senate, Committee on Commerce, Science, and Transportation, *Broadband Adoption: The Next Mile: Hearing before the Subcommittee on Communications, Technology, and the Internet of the Committee on Commerce, Science, and Transportation*, 113th Cong., 1st sess., October 29, 2013.
21. Ibid.
22. Republican Press Office. "Press Release | Thune/Klobuchar Lead Letter to FCC on Rural Broadband," *U.S. Senate Committee on Commerce, Science, & Transportation*, May 6, 2014, [www.commerce.senate.gov/public/index.cfm?p=PressReleases&ContentRecord\\_id=e49978bd-119c-43bd-9cfb-f71bad277aba](http://www.commerce.senate.gov/public/index.cfm?p=PressReleases&ContentRecord_id=e49978bd-119c-43bd-9cfb-f71bad277aba); *Telecommunication—UNIVERSAL SERVICE*. 47 CFR pt. 54.
23. Institute of Museums and Library Services, *Public Hearing: "Libraries and Broadband: Urgency and Impact,"* Washington, D.C., United States, 2014, [www.ims.gov/about/broadband\\_hearing.aspx](http://www.ims.gov/about/broadband_hearing.aspx).
24. US Department of Commerce, National Telecommunications and Information Administration, "NTIA Broadband Adoption Toolkit Shares Best Practices Across U.S. | NTIA," by Juliana Gruenwald, May 2, 2013, [www.ntia.doc.gov/press-release/2013/ntia-broadband-adoption-toolkit-shares-best-practices-across-us](http://www.ntia.doc.gov/press-release/2013/ntia-broadband-adoption-toolkit-shares-best-practices-across-us).
25. American Library Association, "E-Government Toolkit | Advocacy, Legislation & Issues," accessed June 11, 2014, [www.ala.org/advocacy/advleg/federallegislation/govinfo/egovernment/egovtoolkit](http://www.ala.org/advocacy/advleg/federallegislation/govinfo/egovernment/egovtoolkit).

## Errata

An error was made concerning authorship of the recent International Documents column in *DttP*, Fall 2014 issue, Volume 42 issue 3, page 10–12. An error was made during the editing and production phase of the issue. This error indicated that both James Church and Jane Canfield coauthored the article. Attribution for authoring the article should have gone to James. A similar error was made with the State and Local Documents column. Dan Stanton was author of the most recent column. Dan shares writing duties of the column with Celina Nichols. It is the intent of these columns that the two of authors alternate the writing of the column, with each as sole author for the given column in the issue. The editors apologize for any confusion this may have caused.

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